

REMARKS

Claims 1-8 are pending in the application.

Claim Rejections - 35 U.S.C. § 112

Claims 6 and 7 have been rejected under 35 U.S.C. § 112, first paragraph, because the “a fuel burning velocity coefficient” limitation is considered new matter.

Applicants submit that the “fuel burning velocity coefficient,” recited in claims 6 and 7 is clearly supported at least by the disclosure in Figs. 2, 3C and page 12, lines 6-10 of the specification as filed.

More specifically, with regard to claim 6, Fig. 2 and page 12 of the specification clearly discloses that the burnt particulate amount calculating unit (b4) is configured to calculate the amount (Mb) of burnt particulates on the basis of the temperature (gt) of exhaust gas in front of the particulate filter or the temperature of the particulate filter, and a fuel burning velocity coefficient (α , see box b0 in Fig. 2).

Further, with regard to claim 7, Fig. 2, 3C and page 12 of the specification clearly discloses that the fuel burning velocity coefficient (α) is obtained from a map (m0, see Fig. 3C) based on the temperature (gt) of exhaust gas in front of the particulate filter or the temperature of the particulate filter.

In view of the foregoing, Applicants believe that the limitations recited in claims 6 and 7 are clearly supported by the original disclosure of the present application, and thus do not introduce new matter.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejections - 35 U.S.C. § 102

Claim 1 has been rejected under 35 U.S.C. § 102(e) as being anticipated by Mikami et al. (USP 6,655,133). This rejection is respectfully traversed.

In the Office Action, the Examiner states that Mikami discloses a particulate accumulation amount calculating unit configured to calculate an amount of accumulated particulates on the basis of the calculated amount of the discharged particulates and the calculated amount of the burnt particulates.

The Examiner, however, fails to point out that Mikami discloses “a discharged particulate amount calculating unit configured to obtain an amount of discharged particulates from a map on the basis of an excess air ratio,” as recited in claim 1. Such a feature is disclosed, for example, in Fig. 2 (a1), Fig. 3A, and page 10, lines 34-35 of the original specification.

Indeed, Mikami discloses, in col. 18, lines 35-41, that the accumulation amount of the particulates may be obtained by the difference (M-G), where M is the discharged particulates amount assumed by the current engine operation condition, and G is the possible oxidization amount considering the particulates temperature assumed by the current engine operation condition.

However, even assuming that Mikami inherently discloses means for obtaining the amount of discharged particulates (which was not specified by the Examiner in the Office Action), which Applicants do not admit, the amount of discharged particulates is assumed by the current engine operation condition, and is not obtained “from a map on the basis of an excess air ratio,” as recited in claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejections - 35 U.S.C. § 103

Claim 8 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mikami. This rejection is respectfully traversed.

Claim 8, dependent on claim 1, is allowable at least for its dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Allowable Subject Matter

Applicants appreciate the Examiner's indication that claims 2-5 are allowable over the prior art of record.

Conclusion

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of the pending claims in the present application are respectfully requested.

The Examiner is respectfully requested to enter this Amendment After Final in that it raises no new issues. Alternatively, the Examiner is respectfully requested to enter this Amendment After Final in that it places the application in better form for Appeal.

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi Reg. No. 40,417 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

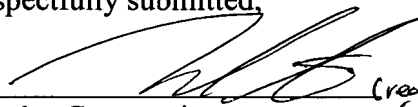
Application No. 10/531,329
Amendment dated September 26, 2007
After Final Office Action of June 26, 2007

Docket No.: 1575-0155PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: September 26, 2007

Respectfully submitted,

for By  (reg # 40,417)
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